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EXAMINER

WOOD, WILLIAM H

ART UNIT	PAPER NUMBER
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2124

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DATE MAILED: 07/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/510,747

Applicant(s)

LY, HUEY

Examiner

William H. Wood

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claims 1-7 and 9-21 have been reconsidered as requested by Applicant.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 and 9-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Touboul (USPN 6,125,390) in view of Hodges et al. (USPN 6,035,423) and in further view of Dunn et al. (USPN 5,822,543).

In regard to claim 1, Touboul disclosed the limitations:

i) *a method by which a managing computer manages applications residing on a managed computer* (Touboul: column 1, line 56 to column 2, line 3)

Touboul did not teach *the agent upon arriving on the managed computer maintaining specified applications residing on the managed computer including making updates to the specified applications when new versions of the specified applications are available on the managing computer*. Hodges demonstrated that it was known at the time of invention to maintain software and make updates as necessary (Hodges: column 1, lines 7-11). It would have been obvious to one of ordinary skill in the art at the time of invention to implement Touboul's agents with software updating as found in Hodges' teaching. This implementation would have been obvious because one of ordinary skill

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in the art would be motivated to shift useful functionality to an automated agent in order to decrease burden on the network administration. In the case of virus prevention software of Hodges, this means the user and the network administration are required to do less yet maintain an acceptable level of virus protection.

Neither Touboul nor Hodges explicitly stated *forwarding an agent from the managing computer to the managed computer or the agent upon arriving on the managed computer installing itself on the managed computer*. Dunn demonstrated that it was known at the time of invention for code to be embodied with the ability to “self-install” and for this code to come from a central location (Dunn: column 8, lines 42-48). It would have been obvious to one of ordinary skill in the art at the time of invention to implement Touboul’s agent software with “self installation” and being sent from the managing computer as found in Dunn’s teaching. This implementation would have been obvious because one of ordinary skill in the art would be motivated to make use of software, which is self-contained and self-reliant (Dunn: column 8, lines 42-48).

In regard to claim 2, Touboul, Hodges and Dunn disclosed the limitation *wherein in step (a) the agent additionally performs a.3) detecting lost network connections* (Touboul: Figure 3, elements 34 and 36; the agent must detect the network in order to operate).

In regard to claim 3, Touboul, Hodges and Dunn disclosed the limitation *wherein in step (a) the agent additionally performs a.3) monitoring network connection speed between the managed computer and the managing computer to determine a best time to transfer*

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data from the managing computer to the managed computer (Dunn: column 2, lines 15-33; the agent monitors data of transmission times in order to assist in determining the best time to transmit data). It would have been obvious to one of ordinary skill in the art at the time of invention to implement Touboul's agent software with monitoring network connection speed as found in Dunn's teaching. This implementation would have been obvious because one of ordinary skill in the art would be motivated to use self contained software (agent) that can make decisions on it own and thus reduce the workload of the administrator.

In regard to claim 4, Touboul, Hodges and Dunn disclosed the limitation *wherein in step (a) the agent additionally performs a.3) monitoring integrity of specified applications within the managed computer to ascertain when repair is needed* (Touboul: column 2, lines 38-54; column 8, lines 44-52; column 9, lines 14-45; Touboul indicates the agent monitors applications to determine when events occur, such as failing programs, this would indicate some "repair" action is needed).

In regard to claim 5, Touboul, Hodges and Dunn disclosed the limitation *wherein in step (a) the agent additionally performs a.3) monitoring communications from the managing computer to determine when the managing computer desires the agent to take a requested action* (Touboul: column 8, line 44 to column 10, line 57; triggers in particular).

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In regard to claim 6, Touboul, Hodges and Dunn did not explicitly state *wherein in substep a.3) the requested action is to uninstall an application*. Touboul demonstrated that it was known at the time of invention to customize actions from a managing computer to a managed computer (Touboul: column 9, lines 3-12). Furthermore, Hodges is clearly installing applications, uninstalling is just as common an operation. It would have been obvious to one of ordinary skill in the art at the time of invention to implement the Touboul, Hodges and Dunn agent system with the ability to uninstall applications. This implementation would have been obvious because one of ordinary skill in the art would be motivated to perform remote network operations for system management and thus easing the burden of a system administrator actually having to go to each individual computer.

In regard to claim 7, Touboul, Hodges and Dunn disclosed the limitation *wherein in substep a.3) the requested action is to stop an application* (Touboul: column 9, table 2, element T8; table 3, element T19).

In regard to claim 9, Touboul, Hodges and Dunn disclosed the limitations concerning additional substeps:

a.3) monitoring network connection speed between the managed computer and the managing computer (Dunn: column 2, lines 15-33; the agent monitors data of transmission times in order to assist in determining the best time to transmit data)

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Touboul, Hodges and Dunn did not explicitly state *stopping all network applications on the managed computer when the network connection speed is below a predetermined threshold*. The above references demonstrated that it was known at the time of invention to utilize agents to control a managed computer. Official Notice is taken that it is beneficial to stop using a network if the speed of the network is insufficient. It would have been obvious to one of ordinary skill in the art at the time of invention to implement Touboul, Hodges and Dunn with this added agent control. This implementation would have been obvious because one of ordinary skill in the art would be motivated to use a self sufficient software component, agent, to reduce burden on the network administration and also to stop using a network and thus reduce the strain on a network system, which is already struggling.

In regard to claim 10, Touboul, Hodges and Dunn disclosed the limitations concerning additional substeps:

a.3) *downloading a specified application form the managing computer to the managed computer* (Hodges: column 8, lines 36-51; Figure 4)

a.4) *installing the specified application* (Hodges: column 8, lines 36-51; Figure 4)

In regard to claims 11-16 and 21, the claims represent agent apparatus claims which correspond to the method for operating an agent claims of 1-10. Though the limitations are arranged differently they are the same and rejected in view of Touboul, Hodges and Dunn in combination.

In regard to claims 17-20, claim 17 is a storage media that stores programming code claim corresponding to the agent claim 11 and rejected under the same reason set forth under claim 11. The claims 18-20 are storage media that stores programming code claims corresponding to claims 12-16 and are rejected based upon the claim 11 rejection and the reasoning of claims 12-16.

Examiner's Response

3. Applicant's arguments filed 23 April 2003 in respect to claim 1 have been fully considered but they are not persuasive. Applicant argued: ^{a)} Examiner has used an invalid piecemeal reconstruction of prior art using hindsight of Applicant's disclosure in the obviousness rejection by not providing a motivation for combination; and ^{b)} the combination of Touboul and Dunn would destroy Touboul. Examiner disagrees. First, Examiner notes that neither the cited *In re Kamm and Young* or *Uniroyal Inc. v. Rudkin-Wiley Corp.*, on page 5 of the Applicant's response, have anything to do with software development and do not appear to be applicable to the current application.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include

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knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper.

See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the additionally cited art Hodges and Dunn are obvious because they aid the system in some manner. Hodges allows the users and administration to have less work to do and thus easing the use of the system. Dunn also increases the ease of system use and produces more reliable agents, which are self-contained.

Second, Touboul would not be destroyed as Applicant asserts on page 6 of the Request for Reconsideration. Applicant cites the passage column 2, lines 16 and 17 and indicates that automatic discovery of agents somehow overcomes "self installation". This passage gives no indication to installation procedures and doesn't dissuade one from the obvious rejection stated in the previous action.

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4. Applicant's arguments filed 23 April 2003 in respect to claims 11 and 17 have been fully considered but they are not persuasive. Applicant argues "there is no disclosure or suggestion in the prior art that the functionality of an integrity sensor, an action sensor and a main engine all are implemented within a single agent running on a managed computer". Examiner disagrees. Claim 4 addresses an integrity sensor. Claim 5 addresses an action sensor. Claims 1-10 in general address a main engine inherently by the fact that the claims state the above sensors are present in the agent, therefore the agent itself is the main engine or more specifically a routine in the agent itself which directs the operation of the agent. As the prior rejection shows the groupings 11-16 and 21 and 17-20 are similar to claims 1-10 and rejected in an analogous manner.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Wood whose telephone number is (703)305-3305. The examiner can normally be reached 7:30am - 5:00pm Monday thru Thursday and 7:30am - 4:00pm every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (703)305-9662. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-7239 for regular communications and (703)746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

William H. Wood
June 16, 2003

Kakali Chaki
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